

#10

1631

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/417,522A

DATE: 08/15/2000
TIME: 16:06:28

Input Set : A:\8535-027.txt
Output Set : N:\CRF3\08152000\I417522A.raw

4 <110> APPLICANT: Nehls, Michael
5 Zambrowicz, Brian
6 Sands, Arthur T.
8 <120> TITLE OF INVENTION: NOVEL HUMAN POLYNUCLEOTIDES AND THE
9 POLYPEPTIDES ENCODED THEREBY
12 <130> FILE REFERENCE: 8535-0027-999
14 <140> CURRENT APPLICATION NUMBER: US 09/117,522A
15 <141> CURRENT FILING DATE: 1999-10-13
17 <150> PRIOR APPLICATION NUMBER: US 60/104,292
18 <151> PRIOR FILING DATE: 1998-10-14
20 <160> NUMBER OF SEQ ID NOS: 503
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 40
26 <212> TYPE: DNA
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: Synthetic sequence
32 <400> SEQUENCE: 1
33 tggctaggcc ccaggatagg cctcgtctggc cttttttttt 40
35 <210> SEQ ID NO: 2
36 <211> LENGTH: 24
37 <212> TYPE: DNA
38 <213> ORGANISM: Artificial Sequence
40 <220> FEATURE:
41 <223> OTHER INFORMATION: Synthetic sequence
43 <400> SEQUENCE: 2
44 gccatggctc cggtaggtcc agag 24
46 <210> SEQ ID NO: 3
47 <211> LENGTH: 19
48 <212> TYPE: DNA
49 <213> ORGANISM: Rattus norvegicus
51 <400> SEQUENCE: 3
52 tggctaggcc ccaggatag 19
54 <210> SEQ ID NO: 4
55 <211> LENGTH: 19
56 <212> TYPE: DNA
57 <213> ORGANISM: Artificial Sequence
59 <220> FEATURE:
60 <223> OTHER INFORMATION: Synthetic sequence
62 <400> SEQUENCE: 4
63 gtccagagat ggccatagc 19
65 <210> SEQ ID NO: 5
66 <211> LENGTH: 18
67 <212> TYPE: DNA
68 <213> ORGANISM: Artificial Sequence
70 <220> FEATURE:

ENTERED

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71 <223> OTHER INFORMATION: Synthetic sequence
 73 <400> SEQUENCE: 5
 74 ccaggatagg cctcgtg 18
 76 <210> SEQ ID NO: 6
 77 <211> LENGTH: 23
 78 <212> TYPE: DNA
 79 <213> ORGANISM: Bacteria Phage Lambda
 81 <400> SEQUENCE: 6
 82 tacagttttt ctgtgaaga ttg 23
 84 <210> SEQ ID NO: 7
 85 <211> LENGTH: 19
 86 <212> TYPE: DNA
 87 <213> ORGANISM: Bacteria Phage Lambda
 89 <400> SEQUENCE: 7 19
 90 gggtagtccc cacttttg
 92 <210> SEQ ID NO: 8
 93 <211> LENGTH: 20
 94 <212> TYPE: DNA
 95 <213> ORGANISM: Mus musculus
 97 <400> SEQUENCE: 8 20
 98 tccaagtect gcatctcac
 100 <210> SEQ ID NO: 9
 101 <211> LENGTH: 277
 102 <212> TYPE: DNA
 103 <213> ORGANISM: Homo sapiens
 105 <400> SEQUENCE: 9
 106 gtgttggtgt gatgcaggag acaaccgcga agatggggac agaatacagta acatcgcagt 60
 107 aagggaattg aagcagaaga tcacgtgtcc tgcagacacc aggaacgcc aagaccccc 120
 108 ttccacgaac caacattctt ccacctcttc caacttttt ctggaacccc ttcaattcca 180
 109 accgccaact aatgtacact tcaatttctc gtgctcttcc taagagagta gtgttttctt 240
 110 cctcccccac gagaaaaaaa ataaaagcaa caactgg 277
 112 <210> SEQ ID NO: 10
 113 <211> LENGTH: 434
 114 <212> TYPE: DNA
 115 <213> ORGANISM: Homo sapiens
 117 <400> SEQUENCE: 10
 118 cgtcatgttc ctgcaaaagag aaaaaataagg aaaaaatctg caaaacattg aagactcatg 60
 119 accccacttta aaaacataac tggatacatc acatgaactc aagaccatga ctatggagga 120
 120 agatttaaca ctgggcaact cttacaacaa caacaacagc aacagggaaa aacaacaaca 180
 121 acaacaaccc aagagtgcga aaagaactaa tgcattctct aggttaagcct ggaaggagcc 240
 122 tctaagacct aacaggatgt ctgagattcc aggggaagtgg cctgtgatct gtcagtaaac 300
 123 aaataagaag ctaatacagc tttgttgtgt tttctgattg gcatggttct tgaactatct 360
 124 cctacttgta gttgcagaca aagaacacag agatgaatta ccatgttcta ggactttgtg 420
 125 ttccctttcca attc 434
 127 <210> SEQ ID NO: 11
 128 <211> LENGTH: 107
 129 <212> TYPE: DNA
 130 <213> ORGANISM: Homo sapiens
 132 <400> SEQUENCE: 11

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133 gtccacaaca gtgttatgac gggagcaagg aggcacctac atccattgga cccatctga 60
134 caqctgggaa ggatgtgtcc agccaccacg ggatgtgcat ctggcaccca cctcacaaca 120
135 gctgtttctaa ccacgtaaqa agcacaaggg tcaccggtta ctctccatga qaacaaaagg 180
136 ccaaggatgc agagataatt gcatacaaag gattcaactt cctggatgac ctcattccaa 240
137 agatctgcag agcccagata agcatcccag ggttctggca gagggccctt ccagggaacg 300
138 gaaggggaca ggaagccggc ttccgtgtc tttaccgctt tcttgggaa ggataggaca 360
139 cctgtggcca tcaagtcatt atgccccttc tttctgaaac gaaaaaca 407
141 <210> SEQ ID NO: 12
142 <211> LENGTH: 200
143 <212> TYPE: DNA
144 <213> ORGANISM: Homo sapiens
145 <400> SEQUENCE: 12
147 gagggagaact ggtggtttta taagaagagg aaagagagac aaagcatgac atgtcagcat 60
148 gccaggtccc ctctccacgc tataccctgt gccacctcca gacatttcag agaccaggaa 120
149 taaggccctc accaagaagt cccctccaat ctgggaactc ctatctcca tggctgtaag 180
150 gaataaatte cttttctttc
152 <210> SEQ ID NO: 13
153 <211> LENGTH: 128
154 <212> TYPE: DNA
155 <213> ORGANISM: Homo sapiens
156 <400> SEQUENCE: 13
158 atgaaggaaa agaggagaaa gaaaccagct gcctggaaga ctgacctctt gagatgctct 60
159 ggagccgtgc agttgttctc actggcagat cagtctgttc cctccaataa aagagagggt 120
160 gatcttgg
162 <210> SEQ ID NO: 14
163 <211> LENGTH: 142
164 <212> TYPE: DNA
165 <213> ORGANISM: Homo sapiens
166 <400> SEQUENCE: 14
168 ctgaaaagcaa agaactcttt agatagtgga gtcacactgg aaaaagcaca gacctttgag 60
169 tgtactgctt ggaggagagc taccctggag catttgcctc agattctgca tgagcaaaaa 120
170 ataaactttt gctgcataaa gt
172 <210> SEQ ID NO: 15
173 <211> LENGTH: 149
174 <212> TYPE: DNA
175 <213> ORGANISM: Homo sapiens
176 <400> SEQUENCE: 15
178 acacttaate tgggtgttct gaggtgacc tattggaata tcttgcgtga gaccacgtat 60
179 acaagatgtg aacattcctc attatgaggc tgaatgtaaa atacttcatt ttataatgaa 120
180 gaaagtcagt aaaacaattt ccagcccag
182 <210> SEQ ID NO: 16
183 <211> LENGTH: 166
184 <212> TYPE: DNA
185 <213> ORGANISM: Homo sapiens
186 <220> FEATURE:
187 <221> NAME/KEY: misc_feature
188 <222> LOCATION: (1)...(166)
189 <223> OTHER INFORMATION: n = A,T,C or G
192 <400> SEQUENCE: 16

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```

W--> 193 gaagaagaan ctencctenn catgagaccg ctgtggggat ctggcaactgt ggttctctgna 60
W--> 194 tgcaaacant ggtctggncg tgctgggcn gacaataccc ctttccgtgt cncgggaaan 120
W--> 195 gccncctta aaaaaactga ngnggttgaa aaaccagtaa accctc 166
197 <210> SEQ ID NO: 17
198 <211> LENGTH: 113
199 <212> TYPE: DNA
200 <213> ORGANISM: Homo sapiens
202 <220> FEATURE:
203 <221> NAME/KEY: misc_feature
204 <222> LOCATION: (1)...(113)
205 <223> OTHER INFORMATION: n = A,T,C or G
207 <400> SEQUENCE: 17
W--> 208 accctgatna ngagaccagc tgaggcgaat tatgagtcac ctaaaattat ccaaaagatc 60
209 attttaccgt aaagttagttg ctgaatgtac acgaaatggt tagaaattaa att 113
211 <210> SEQ ID NO: 18
212 <211> LENGTH: 250
213 <212> TYPE: DNA
214 <213> ORGANISM: Homo sapiens
216 <220> FEATURE:
217 <221> NAME/KEY: misc_feature
218 <222> LOCATION: (1)...(250)
219 <223> OTHER INFORMATION: n = A,T,C or G
221 <400> SEQUENCE: 18
W--> 222 cttctnctga agaattgagaa cacttgccag ccctttgcct atgttatcac ctggaataaa 60
W--> 223 ctggatgtgt ctnaatggaa cctgcctcct ttggggagcg catactcccg ccaggtcacc 120
224 acagccacca tgaccacctc atgctctcca tcacactgtt tcattaattt gtgcctggac 180
225 cattttcagt ttcttggtg acatgggtga ggaggaggaa actcaggtaa atgataaagt 240
226 ttgcactatc 250
228 <210> SEQ ID NO: 19
229 <211> LENGTH: 387
230 <212> TYPE: DNA
231 <213> ORGANISM: Homo sapiens
233 <400> SEQUENCE: 19
234 aagacagctg aatgggtcca gtctttcagt cctgtctctg gccaacactg gacctctcaa 60
235 agtctagcca actctcttcc cagcgccttg ataaacaacc cctctatgct gggaaccaca 120
236 gcagtgggtt gtttttctcc ctcatgcacc ccagggaagc tctctctttt gcttgggttt 180
237 tcttcccaag qccttagctg ccaaccatt ttacacccat gcgaagccca gtcagtcacc 240
238 tgaagaaaag gagaatcaca gaaggcccaa gatgaaagac tctttaatcc tgtggctttt 300
239 tgagttttgt ttttgcagg aagacattat ttcaaaaaca aattgtttaca cagaattttg 360
240 cagtttacag aacagatgaa taaagac 387
242 <210> SEQ ID NO: 20
243 <211> LENGTH: 216
244 <212> TYPE: DNA
245 <213> ORGANISM: Homo sapiens
247 <220> FEATURE:
248 <221> NAME/KEY: misc_feature
249 <222> LOCATION: (1)...(216)
250 <223> OTHER INFORMATION: n = A,T,C or G
252 <400> SEQUENCE: 20

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```

W--> 253 gcctaactgn tncaggagtg tetgettgea tggacaccat tgtggaaaac ttcctccgca 60
      254 cctqtgccag gctcttgtgg atgccatcaa caaacccctc tgacacctct gacgggagca 120
W--> 255 tgtgaataac accgaataat cacaacaaat cctcctcctc ataaagcctt gcgnggactg 180
W--> 256 gcactcgcaa atattttaa atantattaaa acactg 216
      258 <210> SEQ ID NO: 21
      259 <211> LENGTH: 541
      260 <212> TYPE: DNA
      261 <213> ORGANISM: Homo sapiens
      263 <220> FEATURE:
      264 <221> NAME/KEY: misc_feature
      265 <222> LOCATION: (1)...(541)
      266 <223> OTHER INFORMATION: n = A,T,C or G
      268 <400> SEQUENCE: 21
W--> 269 ngtaatnnag gngganegccc cctgggtgagg gaactgacca gcagactcca gcagctgtgg 60
      270 gaaaactcta ctgatgacag gcaagaagcc agactgtctc gacctagagc tataaggaaa 120
      271 cctgagtaag ctgggagtga agttatcccc aatcaaccca ccagtgattt ctgaagccaa 180
      272 taatttgggc cttggaagtt tgtgctgtat ggaaaaaaat cacccttctt ggtgacatc 240
      273 tgttttctgt gtaacacaaa tgcaacttat taatcatctc tgggtaagca agaaatgtaa 300
      274 tctgaaaaat ggtttacaag agaaaatctt ggaagataag accgtaacac taaaacgctc 360
      275 ctccagatgc cttaggaaca tccccaaaga gtaacagata aagtcctctc ataggattct 420
W--> 276 tggctatggt taagtttctc atagaaaaaa ataaaaataac naaacnchnaa aaaaaaaagg 480
W--> 277 gcccgngggg ccaattcagn ttggaactaa ccaggtgtaa ctngttaaaa aggggggggg 540
      278 g 541
      280 <210> SEQ ID NO: 22
      281 <211> LENGTH: 492
      282 <212> TYPE: DNA
      283 <213> ORGANISM: Homo sapiens
      285 <220> FEATURE:
      286 <221> NAME/KEY: misc_feature
      287 <222> LOCATION: (1)...(492)
      288 <223> OTHER INFORMATION: n = A,T,C or G
      290 <400> SEQUENCE: 22
W--> 291 gacgtctggg gagctcctgc nttaagtnaa acnngaggtt ttngtnngcc ccagnaaaan 60
W--> 292 nngantcggc canaccnnaa aaaatcccan cctcaccag agatgacacg tgacctgggtg 120
      293 ggcctcaccg agggcataca gctttccag ctagcaaaac aacaagccct ggtcacagcg 180
W--> 294 gttatagctg gctcattggtc gctcacagac actctgggca tgcattcccg tgacttanaa 240
      295 aagaggagcg ctttggaaac tggcagtgtc gtctgtgat tgtgaggtgt ctggaacctg 300
      296 gggccccatg gccctctcac accagcatgg tgctctgcaa agggcagcig cttcttcctc 360
      297 tgtctcaatg atacacagtt tttttcccca aaactttagt agcgccaact tccctatcac 420
W--> 298 tctgtcttta attttgcccc ttattgntcc ttanattaaa aaatatcctc ctttcatnng 480
      299 agggttggac ct 492
      301 <210> SEQ ID NO: 23
      302 <211> LENGTH: 273
      303 <212> TYPE: DNA
      304 <213> ORGANISM: Homo sapiens
      306 <400> SEQUENCE: 23
      307 gctctgagtc aatacaagta gggaagtcca actgggtccc tgggtgttca ttcctgggtg 60
      308 gagagctggt tgggaggtcg ggaaggtcca ttagaagcat aattctatct cagaggtggc 120
      309 ttgycagatg gagcatatca tgggttaatt tctcagcatg tcacagaaag caattcctac 180

```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

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Input Set : A:\8535-027.txt

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L:193 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:16
L:194 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:16
L:195 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:16
L:208 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:17
L:222 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:18
L:223 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:18
L:253 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:20
L:255 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:20
L:256 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:20
L:269 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:21
L:276 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:21
L:277 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:21
L:291 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:22
L:292 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:22
L:294 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:22
L:298 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:22
L:330 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:24
L:331 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:24
L:351 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:25
L:384 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:28
L:385 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:28
L:386 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:28
L:387 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:28
L:388 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:28
L:389 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:28
L:390 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:28
L:391 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:28
L:409 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:29
L:410 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:29
L:425 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:30
L:466 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:33
L:486 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:34
L:487 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:34
L:531 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:38
L:551 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:39
L:566 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:40
L:612 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:43
L:613 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:43
L:627 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:44
L:628 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:44
L:648 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:45
L:649 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:45
L:650 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:45
L:651 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:45
L:652 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:45
L:653 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:45
L:667 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:46
L:669 M:341 W:(46) "n" or "Xaa" used, for SEQ ID#:46

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L:695 M:341 W: (16) "n" or "Xaa" used, for SEQ ID#:48
L:701 M:341 W: (16) "n" or "Xaa" used, for SEQ ID#:48